CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2007
DateRun:	10/22/2007
Experimenters:	Jason Marshall, Shweta Bansal
ClientType:	Cleaner Manufacturer
ProjectNumber:	Project #1
Substrates:	Glass/Quartz, Chrome
PartType:	Coupon
Contaminants:	Films, Soaps
Cleaning Methods:	Manual Wipe
Analytical Methods:	Gravimetric
Purpose:	To evaluate supplied products for glass cleaning on two substrates using manual wiping.
Experimental Procedure:	The four supplied cleaning product were used at the supplied concentrations. Preweighed chrome and glass coupons were coated with SSL Soil 2 (Glass soap scum: Colgate Regular shaving cream 5.3%, Arid Extra Extra Spray Deodorant 3.5%, Suave Naturals Flexible Hold hair spray 3.7%, Aleeda Texturizing hair gel 25.6% Colgate Total toothpaste 10.4%, Water 51.5%) by pump spraying the mix. The soil was allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. Three coupons were placed into a Gardner Straight Line Washability unit. A Kimberly-Clark WypAll X60 reinforced wipe was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 5 cycles (~9 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded, efficiencies were calculated and recorded.
Results:	All four products removed over 95% of the soap scum from the two surfaces. The table lists the amount of soil added, the amount remaining, the efficiency for each coupon cleaned and the average removal from each substrate type.

Cleaner	Substrate	Initial wt	Final wt	% Removed
Windex	Glass	0.0653	0.0021	96.78
		0.0635	0.0014	97.80
		0.0636	0.0033	94.81
	Chrome Plated	0.0657	-0.0258	139.27
		0.0843	-0.0224	126.57
		0.1121	-0.0123	110.97
Meyer Widow	Glass	0.0548	0.0027	95.07
		0.0641	-0.0007	101.09
		0.0921	0.0039	95.77
	Chrome Plated	0.1441	-0.0071	104.93
		0.0881	-0.0125	114.19
		0.0930	-0.0075	108.06
Seventh Glass	Glass	0.0593	0.0013	97.81
		0.0344	0.0014	95.93
		0.0461	0.0026	94.36
	Chrome Plated	0.1634	-0.0131	108.02
		0.1162	-0.0271	123.32
		0.1042	-0.0255	124.47
DFC Glass	Glass	0.0554	0.0077	86.10
		0.0698	0.0044	93.70
		0.0747	0.0058	92.24
	Chrome Plated	0.1213	-0.0005	100.41

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		0.1257	-0.0013	101.03
		0.0966	-0.0001	100.10

Summary:

Substrates:	Glass/Quartz, Chrome
Contaminants:	Films, Soaps

Company Name:	Product Name:	Conc.:	Efficiency:	Effective:	Observations:
SC Johnson & Son Inc	Windex Glass & More Cleaner (Spray)	100	95.42	☑	
Mrs Myers Clean Day	Mrs Meyers Glass Cleaner	100	97.62	☑	
Seventh Generation	Natural Glass and Surface Cleaner	100	96.50	☑	
Cogent Environmental Solutions	DFC Glass	100	95.44	☑	

Conclusion: All four products surpassed the 85% cut off level for effectiveness.